US ERA ARCHIVE DOCUMENT

U.S. ENVIRONMENTAL PROTECTION AGENCY

RESPONSIVENESS SUMMARY

ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT
EPA DOCKET NOS.
RCRA-07-2013-0001
CERCLA-07-2013-0001

Introduction

On October 18, 2012, the U.S. Environmental Protection Agency, Region 7 (EPA), commenced a thirty-day public comment period on an Administrative Settlement Agreement and Order on Consent (Order) pertaining to the Chicago Heights Site located in St. Louis County, Missouri (MOSFN0703551 and MOD006283808). The Order was signed by PerkinElmer, Inc. (PerkinElmer), the Respondent, on October 2, 2012. Section XXXV (Public Comment) of the Order provides that "EPA will provide public notice, opportunity for a public meeting, and a reasonable opportunity for public comment on this Order. After consideration of any comments submitted to EPA during the public comment period, EPA may withhold consent or seek to amend this Order if EPA determines that comments received disclose facts or considerations which indicate that this Order is inappropriate, improper, or inadequate."

On October 18, 2012, EPA published a notice informing the public of the opportunity to comment on the Order, as well as the date and time of a public availability meeting to discuss the Order, respond to questions, and accept comments on the Order. This notice was published in the *St. Louis Post-Dispatch*, a daily major local newspaper of general circulation in the St. Louis area, and the *St. Louis American*, a weekly newspaper serving the African-American community in the St. Louis metropolitan area. Publication in both of these newspapers occurred on October 18, 2012. In the published notice it was announced that EPA would be accepting comments on the Order through November 19, 2012.

A public availability meeting to discuss the Order and receive comments was held in St. Louis, Missouri on October 25, 2012. Relevant documents pertaining to the Order were available for public review at the EPA Records Center in Lenexa, Kansas and at the St. Louis County Public Library, 1640 S. Lindbergh, the Mid-County Library, 7821 Maryland Avenue, and the Indian Trails Library, 8400 Delport Drive, all located within St. Louis County. These documents remain available at these public repositories as they are part of the Administrative Record file for the Site. The Administrative Record file is also available on-line at: www.epa.gov/region7/cleanup/chicago_heights/admin_record.htm.

EPA received comments from local residents orally at the public availability meeting, in writing during the public availability meeting, and in writing following the public availability meeting.



The following comments are presented as offered to EPA. In some instances, numerous comments were offered that addressed similar issues. For these comments, EPA has aggregated and restated the comments as one comment. EPA's responses appear in italics. Parenthetical references to the location of each comment within the transcript - which can be found in the Administrative Record file for the Site - is also provided. Please note that the purpose of the public comment period was for EPA to collect input on the proposed Order. In many instances, the comments did not pertain to the Order but rather pertained to health issues, sale of property, etc. For these questions and comments, a summary response may be provided.

Comments Received and EPA's Responses

- 1. A comment was received regarding "cloudy water" in a house in the neighborhood (page 25 of transcript).
- The water that residents use in their houses is provided by the City, and does not come from, nor should it be affected by, groundwater beneath a portion of the neighborhood. EPA does not know the cause of the cloudy water but it is extremely unlikely that that this would be related to Site contamination.
- 2. A comment was received regarding a leaking basement (page 25 of transcript). Contaminated groundwater entering basements can provide an additional source of contaminant vapors to indoor air. In homes which have received vapor mitigation systems, the sump pumps (if present) have been sealed and upgraded to help prevent groundwater from leaking into the basements.
- A comment was received regarding how far the contaminated groundwater has moved, and how long the contaminants stay in people's bodies (page 26 of transcript). PerkinElmer will conduct additional sampling in the coming months to refine our understanding of how far the groundwater contaminant plume extends. We have some data on the extent of the plume now, but more data is required to fully define the plume. If the vapor-phase contamination is inhaled, which is the primary expected exposure route for affected residents, about half the amount you breathe in will get into your bloodstream and organs. You will exhale the rest. Once in your blood, your liver changes much of the trichloroethylene into other chemicals. The majority of these breakdown products leave your body in the urine within a day. You will also quickly breathe out much of the trichloroethylene that is in your bloodstream. Some of the trichloroethylene or its breakdown products can be stored in body fat for a brief period, and thus may build up in your body if exposure continues. 'There are some tests that can show whether you have been recently exposed to trichloroethylene since this chemical can be measured in your breath. Also, a doctor can have trichloroethylene or a number of breakdown products of trichloroethylene measured in your urine or blood. None of these tests, however, is routinely available at your doctor's office. If the measurements are done soon after the exposure, the breath levels can indicate whether you have been exposed to a large amount of trichloroethylene or only a small amount. Urine and blood tests can also show if you have been exposed to large amounts of this chemical. Because one of the breakdown products leaves your body very slowly, it can be measured in the urine for up to about one week after trichloroethylene exposure. However, exposure to other similar chemicals can produce the same

breakdown products in your urine and blood. Therefore, these methods are not definitive in determining whether you have been exposed to trichloroethylene.

- 4. Comments were received regarding the need for residents to disclose the presence of the contamination to prospective buyers when selling their homes (pages 27 and 28 of transcript). EPA cannot provide specific legal advice to residents with regard to disclosures that they may need to provide with regard to real estate transactions.
- 5. Comments were received regarding making conversations that were to occur during the public availability portion of the meeting a part of the transcript (pages 30 and 35 of transcript). EPA divided the October 25th public availability meeting into two components; a public meeting which was transcribed by a court reporter and an availability session which was not transcribed. It is EPA's experience that there will be people attending public meetings who do not want their comments to be made public and transcribed into a public record. Requiring all comments to be on the record may have the undesirable effect of "chilling" public input. It was EPA's goal for the public availability portion of the meeting to be conducted in an atmosphere where people would be comfortable discussing issues that may be private and/or confidential.
- 6. A comment was received regarding the formation of an advisory group (page 32 of transcript).

EPA encourages interested residents to consider forming a Community Advisory Group (CAG). The purpose of a CAG is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process. A CAG can assist EPA in making better decisions on how to clean up a site. It provides EPA the opportunity to hear and seriously consider community preferences for site clean-up. More information about CAGs can be obtained from Belinda Young, EPA's Community Involvement Coordinator for this site (contact information appears below) and from http://www.epa.gov/superfund/community/cag/.

- 7. Comments were received on how residents will know if their vapor mitigation systems are operating correctly, how reliable the systems are, and whether the exhaust from these systems poses a risk (pages 34 and 43 of transcript).

 After each vapor mitigation system is installed, PerkinElmer's contractor will provide the residents with information on how the system works and how to make sure it is operating properly. The systems are simple and reliable, but if they do fail, the residents will be able to detect the failure and inform the contractor so it can be repaired. The vapors collected by these systems are released through a pipe at the roofline of the building, and they dissipate before anyone can be exposed to them.
- 8. A comment was received regarding who released the contamination at the site (page 37 of transcript).

There are no records available that indicate when the contamination was released, or whether it was released all at once or over time. The Site had several owners prior to being purchased by PerkinElmer in 1988, so it is not possible to determine which owner or owners were responsible for the release. The Order requires PerkinElmer to investigate and clean up the contamination, regardless of who released it.

- 9. A comment was received from a homeowner seeking a private contractor to test their home (page 38 of transcript).

 According to federal ethics law¹, EPA and its employees are prohibited from recommending or endorsing any particular contractor to provide services.
- 10. Comments were received from residents asking whether people in the neighborhood who have gardens need to stop eating food from those gardens (pages 43 and 45 of transcript). Available studies show that uptake of TCE by garden vegetables does not occur to such an extent as to be of a health concern.
- 11. A comment was received asking what percentage of homes in the neighborhood had been tested for vapor intrusion (page 44 of transcript).

 There are approximately 142 homes and apartments on Chicago Heights Boulevard, Elmridge Place, Wishart Place, Werremeyer Place, and Wibracht Place. The ten homes sampled for indoor air in May 2012 represent approximately seven (7) percent of the homes in the neighborhood.
- 12. A comment was received regarding when the additional testing discussed during the public availability meeting would occur (page 45 of transcript). PerkinElmer's contractor intends to mobilize to the Site on the week of November 26 to begin installing the additional monitoring wells and conduct soil gas borings.
- 13. A comment was received regarding water bubbling out of the ground near a home on Elmridge Place (page 46 of transcript). EPA has been informed by the Housing Authority of St. Louis County that this was a problem with an irrigation system. It is not related to the groundwater contaminant plume.
- 14. A comment was received from a resident whose home had been sampled for vapor intrusion, but she had not received a vapor mitigation system (page 47 of transcript). Only residences where indoor air testing reveals contaminant levels exceeding the health-based standard will receive a vapor mitigation system. The purpose of a vapor mitigation system is to reduce indoor air contaminant levels below the health-based standard so that the vapors do not pose an unacceptable risk to residents. Homes with contaminant levels that are already below the health-based standards pose no unacceptable risks to residents, so no additional action is required for these homes.

The following comments are presented verbatim as received by EPA via email.

15. In 2004 DNR [the Missouri Department of Natural Resources] became aware that the cleanup efforts failed due to high clay content in the soil. What steps are being taken this time to ensure cleanup efforts will be effective? (This comment also appears on page 40 of the transcript.)

EPA is aware that treatment has been attempted at the source area located at the former Missouri Metals facility (9970 Page Avenue). EPA does not consider this to have been a

¹ 5 C.F.R. § 2635.702.

- "failure." Cleaning up volatile organic compounds (VOCs) in clayey soils is difficult and may require the use of several different technologies over a period of years. Valuable information was obtained during the 2004 cleanup efforts which will be used to help select and implement additional cleanup technologies to fully clean up the contaminant source area. This selection process is described in Task V of the Order.
- 16. What are the different steps as they are not clearly outlined in the settlement agreement? The Order requires the performance of certain "tasks" to address the areas of concern vapor intrusion into residences, and contaminant sources for the Site. These tasks address vapor intrusion, additional vapor, groundwater, and source area sampling and delineation, and the selection and implementation of response actions for each contaminant source and exposure pathway. While the Order generally outlines these tasks, the tasks will be further defined and detailed in the workplans that will be submitted by PerkinElmer and reviewed and approved by EPA. Once final, these workplans will be posted on EPA's website (http://www.epa.gov/region7/cleanup/chicago_heights/) and will be fully accessible to the public.
- 17. If not successful, will it take another 8 yrs to let residents know? It is EPA's practice to keep the affected community informed in a timely and appropriate manner regarding site developments. We expect to issue fact sheets, and hold public meetings, as needed, to keep the community informed. There is an Administrative Record file located at three repositories near the site where the public can access the documents that have been, and will be, developed regarding the work to be performed at the site pursuant to the Order. The Administrative Record file is also available on-line for easy and convenient access. As additional documents regarding Site work are approved by EPA they will be made available to the public. If the public ever wishes additional information, or a public meeting to discuss Site progress, a request can be made to EPA's Community Involvement Coordinator, Belinda Young, whose contact information appears below.
- 18. The Order should also include verbiage to monetarily cover residents cost incurred to privately test their homes for levels of contaminate present in their homes. EPA intends to require sampling of any residences suspected, based on sound scientific evidence, of possibly being affected by contaminant vapor. This sampling will be done at no cost to residents.
- 19. I am interested in a buy-out clause being added to the settlement agreement. All residents especially on Elmridge, closely situated to the contamination should be given this option. (This comment also appears on page 40 of the transcript.)

Vapor intrusion can be reliably and effectively mitigated through the installation and operation of a vapor mitigation system. These systems have been, and where needed, will be, installed at no cost to the homeowner or tenant. The performance of these systems will be monitored at no cost to the homeowner or tenant to ensure that they are effective. The operation of these systems results in no unacceptable exposures within the affected residences, and the residences are safe to live in. There is no need for anyone to relocate based on health concerns. It is always EPA's preferred approach to address the risks posed by contamination by using well-designed response actions so people can remain safely in their homes. Requiring a "buy-out" or relocation is an

extraordinary measure that must be supported by compelling health concerns. Those concerns are not present at this Site.

20. Who is looking into the alarmingly high cancer and heart related deaths and/or illnesses in this small predominately African American community? I would like a medical monitoring clause added to the settlement agreement, to allow residents to receive regular cancer/heart screenings at company expense.

EPA is not aware of any epidemiological studies conducted in the area that indicate that the cancer or heart disease incidence is higher in this community than that typically found in a similar community. Until additional data has been collected, discussions of medical monitoring or other health activities, is premature. As part of the work that PerkinElmer will be performing pursuant to Task III of the Order, the Human Health Baseline Risk Assessment Report that was prepared under State oversight in 2006 will be updated. The Human Health Baseline Risk Assessment is an analysis of the potential adverse health effects (current or future) caused by hazardous substance releases from the site in the absence of any actions to control or mitigate the releases. The Human Health Baseline Risk Assessment contributes to site characterization and subsequent development, evaluation, and selection of appropriate response alternatives. In the 2006 report the shallow groundwater to indoor air exposure pathway was not evaluated due to the lack of data. That data will be generated as a result of sampling that PerkinElmer will be conducting pursuant to the Order. It is essential that this pathway be appropriately evaluated to determine whether any public health actions would be appropriate. If this evaluation indicates that there is significant increased risk of adverse health effects in humans from exposure to hazardous substances, a health surveillance, or medical monitoring, program may be considered.

21. Exactly what should the residents do? How can we be sure it's OK to live here? (Comment submitted in writing at the public availability meeting.)

The only likely scenario for residents to be exposed to contaminants at the site is through vapor intrusion. EPA is working with PerkinElmer to quickly identify any additional homes that might have vapor intrusion issues, and if any additional homes with vapor intrusion issues are found, they will receive vapor mitigation systems similar to those already installed in other homes in the neighborhood. Additional indoor air sampling will be conducted to see if contaminant levels in homes change over time, and to ensure that vapor mitigation systems are operating properly. If residents are contacted by EPA or PerkinElmer to have their homes sampled, we ask that they allow access for this work.

For further information about the Site, please contact:

Belinda Young
Community Involvement Coordinator
Office of Public Affairs
U.S. Environmental Protection Agency
11201 Renner Boulevard
Lenexa, KS 66219
913-551-7463

Toll Free (800) 223-0425 young.belinda@epa.gov

Appendix 1 – Copy of Affidavit of Publication for Public Comment Period for Administrative Settlement Agreement and Order on Consent, Chicago Heights Boulevard Site, St. Louis County, Missouri as published in the St. Louis Post-Dispatch on October 18, 2012

Appendix 2 - Copy of as-published notice of *Public Comment Period for Administrative*Settlement Agreement and Order on Consent, Chicago Heights Boulevard Site, St. Louis County,
Missouri as published in the St. Louis American on October 18, 2012

Appendix 3 - EPA Fact Sheet EPA to Host Public Availability Meeting, Chicago Heights Boulevard Site, St. Louis County, Missouri (October 2012)

Appendix 4 - EPA Fact Sheet Facts About Trichloroethylene (TCE) at the Chicago Heights Boulevard Site, St. Louis County, Missouri (October 2012)

Appendix 5 - EPA Frequently Asked Questions Chicago Heights Boulevard Site

Appendix 6 - EPA News Release Public Meeting Scheduled Oct. 25 on Agreement for Cleanup of Chicago Heights Boulevard Site in St. Louis County, Mo (October 18, 2012)

Appendix 7 - October 25, 2012 Public Availability Meeting Transcript

Dids/ Proposels

Public Comment Period for Administrative Softlement Agreement \ and Order On Consent, Chicago Heights Boulevard Site, St. Louis County, Missouri

he U.S. Environmental Protection Agency Region 7 gives notice of a 30 day public comment period for a gending Administrative send of a first period for a gending Administrative and Order on consent (0 rd er) with Perkin Elmer, Inc. regarding the Chicago Helghis Boulevard Site. The site is located in an unincorporated area of St. Louis County, Mo. In the Elmwood Pork neighborhood Pork neighborhood Pork of the County of the Order of the County of

Oct. 18, 2012 - Nov. 19
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to Belinda Young, U.S
EPA, Office of Public
Affairs, 11201 Renner
Blvd. Lenexa, Ks.
66219, or by e-mail al
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If you have questions of need addition al information, pleas contact Belinda Young 1-800-223-0425, 913 551-7463, or al

ST. LOUIS POST-DISPATCH

St. Louis Post-Dispatch and Suburban Journals

AFFIDAVIT OF PUBLICATION

Environmental Protection Agency Attn: Belinda Young 901 N. 5th St. Kansas City, MO 66101

Ad # 1680319-00

THE ATTACHED ADVERTISEMENT WAS PUBLISHED In the St. Louis Post-Dispatch and/or the Suburban Journals On the following date(s): October 19, 2012

Kevin Weaks

COMPANY REPRÉSENTATIVE

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Notary Public, Notary Seal ...
State of Missouri
St. Louis City
Commission # 10991746
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Clemons' death sentence 'unheard of'



Reginald Clemons' counsel Andrew-Lacy, who introduced into evidence an affidavit by David Keys, confers with Judge Michael Manners during the new evidentiary hearing for Clemons granted by the Missouri Supreme Court. Listening at the bench conference are Steven Hawke and Susan Boresi for the Missouri Attorney General and Josh Levine, Clemons' lead counsel. Pool photo provided by St. Louis Post-Diagraph.

Expert witness testifies to disproportionate sentencing

By Chris King Of The St. Louis American

On the second day of the new evidentiary hearing granted for Missouri death row inmate Reginald Clemons by the Missouri Supreme Court (on September 19). Clemons' trial counsel Andrew Lacy introduced into evidence an

Affidavit by David Keys:

Keys is an assistant

professor of criminal justice at

New Mexico State University - Las Cruces. In 1994 he consulted on sentencing proportionality studies for the State of Missouri, and he has contributed expert witness testimony and affidavits in capital trials in the U.S. Supreme Court, Missouri Supreme Court and a federal Court of Appeals in New

"Part of my research is an ongoing study into the rtionality of the death penalty in Missouri across various variables," Key states in the affidavit. "That study informs the conclusions in this

In his opinion submitted to the court. Keys concluded that the death penalty for Clemons is disproportionate because of the racial dynamics of the first-degree murders of which he was convicted and - more strikingly - because of four mitigating factors.

Clemons, who is African American, was convicted of the murders of Julie Kerry and Robin Kerry, who were white. "Research has shown that interracial homicides are the most harshly prosecuted (both as far as the charge levied and the penalty requested)," Keys

Based on his analysis of 591 Missouri first-degree homicide cases from 1978 to 2008, an African-American offender (like Clemons) charged with the first-degree murder of a white victim (like the Kerry sisters) has a 37 percent chance of receiving the death penalty. By contrast a white offender charged with killing a white

victim will receive the death

probability that an African American charged with killing a white victim will receive a death sentence compared to the probabilities when you have white/white defendant/victim pairings or African-American/ African-American defendant/

victim pairings," Keys notes. Though issues of race permeate the Clemons case. Keys considers even more persuasive the evidence of disproportionate sentencing based on four mitigating factors: Clemons' youth at the time of the murders (he was 19) and the facts that he was a firsttime offender, had no weapon and did not know the victims.

☐ "The probability of Clemons receiving the death penalty in light of these mitigating factors was zero, and his sentence was therefore disproportionate under any definition of the word."

- David Keys

Defendants who are accused of committing their crimes when under the age of 21 experience a significant reduction. 47.7 percent, in the probability of a death sentence. according to Keys' research. The probability of receiving a death sentence for weaponless crimes is reduced 8.7 percent. For first time offenders, the probability of receiving a death sentence diminishes 46.1 percent. The probability of a death sentence when the victim was a stranger goes down by Based on sentencing patterns

Keys argues, a defendant with these four mitigating factors "would effectively have a zero percent chance of receiving a death sentence." Yet Clemons deam sentence. Yet Clemons was sentenced to death.

"Out of all of the capital murder cases that I analyzed in Missouri in the 30 years from 1978 to 2008, other than Mr. Clemons, there is no case where a jury has imposed the death penalty when all four factors are present," Keys

Other than Clemons, there

was not just exceptional, but unheard of," Keys notes. The death sentence becomes even more disproportionate. Keys argues, when you factor in that Clemons was convicted as an accomplice. Were Clemons to be executed, Keys testified, he would be only the second defendant nationwide and the first in Missouri to receive à death sentence who was accused as an accomplice and had no prior criminal record.
"Clemons met all of the

conditions that should have moved 100 percent of juries to impose life imprisonment or another lesser sentence vet he still received the death penalty." Keys notes.
"In my expert opinion, the numerical probability of Mr. Clemons receiving the death penalty in light of these mitigating factors was zero, and his sentence was therefore disproportionate under any applicable definition of the



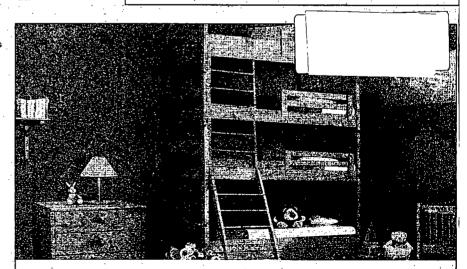
Public Comment Period for Administrative Settlement Agreement and Order On Consent, Chicago Heights Boulevard Site, St. Louis County, Missouri

The U.S. Environmental Protection Agency, Region 7 gives notice of a 30-day public comment period for a pending Administrative Settlement Agreement and Order on Consent (Order) with PerkinElmer, Inc. regarding the Chicago Heights Boulevard Site. The site is located in an unincorporated area of St. Louis County, Mo. in the Elmwood Park neighborhood. Pursuant to the Order, PerkinElmer will be sampling for volatile organic compounds (VOCs) migrating from PerkinElmer's property located at 9970 Page Blvd. St. Louis County, Mo. These VOCs have been released into the groundwater and the groundwater has migrated into the Elmwood Park neighborhood. PerkinElmer has installed vapor intrusion mitigation systems in certain residences in the neighborhood to respond to these vapors. The Order provides for PerkinElmer to fully characterize the VOC source and groundwater contamination, submit to EPA an evaluation of alternatives for addressing the VOCs, and then implement the alternative approved by

EPA will receive comments on the Order for thirty (30) days from Oct. 18, 2012 - Nov. 19, 2012. Comments may be submitted by mail, to Belinda Young, U.S. EPA, Office of Public Affairs, 11201 Renner Blvd., Lenexa, Ks. 66219, or by e-mail at voung belinda@epa.gov. In order to be considered, all comments on the Order must be received by close of business on Nov. 19, 2012. EPA will also host a public meeting on Thurs. Oct. 25, 2012 from 7:00 - 8:30 p.m., at the First Baptist Church of Elmwood Park, 1452 Dielman Road, St. Louis County, Mo. 63132. An EPA presentation will begin promptly at 7:00 p.m. to discuss the Order and answer questions. Comments may also be provided at the

EPA has established an Administrative Record file related to the Order. The Administrative Record file is available for public review during normal business hours at the following locations: St. Louis County Public Library, 1640 S. Lindbergh, St. Louis, Mo. 63131, Mid-County Library, 7821 Maryland Ave., St. Louis, Mo. 63105, Indian Trails Library, 8400 Delport Drive, St. Louis, Mo. 63114, and EPA Records Center, 11201 Renner Blvd., Lenexa, Ks. 66219.

If you have questions or need additional information, please contact Belinda Young, 1-800-223-0425, 913-551-7463, or at young.belinda@epa.gov.



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APPENDIX 2

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Region 7

Iowa Kansas Missouri Nebraska Nine Tribal Nations

Fact Sheet

October 2012

EPA to Host Public Availability Meeting Chicago Heights Boulevard Site St. Louis County, Missouri

INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 7 will host a public availability meeting regarding the Chicago Heights Boulevard Site. The meeting will be Thursday, October 25, 2012, 7:00 – 8:30 p.m. at the First Baptist Church of Elmwood Park, St. Louis County, Missouri.

EPA has reached a tentative settlement with PerkinElmer, Inc., the current owner of 9970 Page Boulevard, the property where EPA believes the source of contamination in the area is coming from. This settlement requires additional investigations and response actions to address this contamination. This settlement is in the form of an Administrative Settlement and Order on Consent (Order). The purpose of the public availability meeting is to describe the work that has recently been conducted in the area in response to the contamination, and to describe and explain the requirements of the Order and the work that is expected to be conducted in the future.

The Order will be available for public comment during a 30-day period beginning October 18, 2012, and ending on November 19, 2012. EPA will provide an opportunity for the public to

comment on the Order during the public availability meeting.

PUBLIC AVAILABILITY MEETING

EPA will host a public availability meeting to provide information and answer questions on next steps for the Chicago Heights Boulevard Site. The public meeting will be held:

Thursday, October 25, 2012 7:00 - 8:30 p.m. First Baptist Church of Elmwood Park 1452 Dielman Road St. Louis County, Missouri 63132

An EPA presentation will begin promptly at 7:00 p.m.

EPA will consider all comments received, and it may seek modification or decline to enter into the Order if comments received disclose facts or considerations which indicate that the Order is inappropriate, improper, or inadequate.

Comments should be submitted by close of business on Monday, November 19, 2012.

Comments may be submitted by mail or e-mail, to Belinda Young, EPA's Community Involvement Coordinator for this site (see below for contact information).

LISTENING POST

On September 12 and 13, 2012, EPA participated in a Listening Post, along with representatives from the Missouri Department of Natural Resources, Missouri Department of Health and Senior Services, and the Agency for Toxics Substances and Disease Registry at the First Baptist Church of Elmwood Park. The Listening Post was conducted in response to community concerns regarding the status of cleanup actions at the site and to share information about impacts to the nearby community.

EPA and other representatives responded to questions and concerns from the public during this two-day event. Attendees were advised that as EPA moves forward, additional opportunities to express concerns would be available in the near future.

ADDITIONAL INFORMATION

EPA has established an Administrative Record file for the Chicago Heights Boulevard Site. The Administrative Record file is available for public review during normal business hours at the following locations:

St. Louis County Library 1640 S. Lindbergh St. Louis, Missouri 63131 314-994-3300

Mid-County Library 7821 Maryland Avenue St. Louis, Missouri 63105 Indian Trails Library 8400 Delport Drive St. Louis, Missouri 63114

EPA Region 7 11201 Renner Boulevard Lenexa, Kansas 66219

For more information, please contact:

Belinda Young

U.S. Environmental Protection Agency Office of Public Affairs 11201 Renner Boulevard Lenexa, Kansas 66219 Phone: 913-551-7463 Toll free: 1-800-223-0425 young.belinda@epa.gov



Region 7

Iowa Kansas Missouri Nebraska Nine Tribal Nations

Fact Sheet

October 2012

Facts about Trichloroethylene (TCE) at the Chicago Heights Boulevard Site St. Louis County, Missouri

INTRODUCTION

At some time before 1988, an unknown quantity of the industrial chemical trichloroethylene (TCE) was released at an industrial site just northwest of the Elmwood Park neighborhood in north St. Louis County, Mo. The chemical traveled down through the soil and into the groundwater, where it flowed generally southeast of the industrial site. Groundwater contaminated with TCE presently exists beneath several Elmwood Park homes located adjacent to the industrial site.

The area where TCE is mixed with groundwater is called the groundwater contamination plume. Because TCE evaporates easily, its vapors tend to leave the groundwater and travel upward through the soil. If a home happens to be located over or near those vapors, the vapors can enter the home, primarily through the sump system and cracks in the foundation. This is called "vapor intrusion" because the vapors intrude or enter into the home. TCE vapors that become trapped in a home, at certain levels, may pose health risks.

In 1988, PerkinElmer, Inc., purchased the industrial property where the TCE release previously occurred. Since purchasing the property, PerkinElmer has worked with the Missouri Department of Natural Resources (MDNR) to identify the extent of the groundwater

contamination plume. Most recently, in September 2012, MDNR transferred regulatory oversight for the site to EPA Region 7.

WHAT IS TCE?

Trichloroethylene (TCE) is a colorless liquid solvent. It is odorless at the low concentrations being found in some of the homes in Elmwood Park. TCE is used primarily for cleaning and degreasing metal parts. It has also been used in adhesives, paint thinners, spot removers, and typewriter correction fluid. In the past, it was even used as a surgical anesthetic. Because TCE is used in many industrial, household and hobbyist products, it is not unusual for very low concentrations to be found in indoor air. TCE is one of the most common contaminants found by EPA at groundwater contamination sites around the country.

WHAT ARE THE HEALTH EFFECTS ASSOCIATED WITH EXPOSURE TO TCE?

Exposure to TCE can cause adverse health effects, especially at high levels. Impacts to the central nervous system, male reproductive system, immune system, kidney and liver function, and the developing fetus have all been reported, as have some fatalities, as a result of exposure to very high concentrations of TCE. High concentration exposures to TCE have

typically occurred in the cases of industrial workers who experienced regular or prolonged exposure to TCE in association with their jobs, and not to persons exposed to TCE because of vapor intrusion in their homes.

Concentrations of TCE found in samples of groundwater below homes in Elmwood Park, and in air samples collected inside and beneath homes in the neighborhood, have been much lower than concentrations typically found in occupational settings.

Although TCE concentrations in occupational settings may be tens, or even hundreds of thousands of times higher than those a person might be exposed to in a home setting, lower level exposures may still pose health risks.

DOES TCE EXPOSURE CAUSE CANCER?

EPA classifies TCE as potentially "carcinogenic (cancer causing) in humans by all routes of exposure." The primary cancers associated with TCE exposure are kidney cancer and non-Hodgkin's lymphoma, although cancers of the liver, gall bladder and bile ducts have also been reported. The risk of developing cancer from TCE exposure is a function of several factors, including length of exposure, the level of TCE in indoor air, and individual susceptibility.

WHAT ABOUT NON-CANCER HEALTH RISKS FROM TCE EXPOSURE?

TCE can cause adverse effects to a developing fetus during pregnancy. Primary developmental effects are heart problems in the fetus, most likely as a result of a mother's exposure to TCE during the first trimester of pregnancy. For adults and children, exposure to lower concentrations of TCE may also result in kidney and immune system problems.

TCE EXPOSURE IN ELMWOOD PARK

At this site, the primary risk of residents being exposed to TCE would come from breathing vapors that may have entered their homes.

IS LOCAL WATER SAFE TO DRINK?

Because the Elmwood Park neighborhood gets its water from a public water supply system that undergoes regular testing for safety, residents should have no concerns about TCE exposure from their drinking water, or from showering, bathing or other skin contact. The public water supply is separate from the groundwater beneath the Elmwood Park neighborhood.

HOW IS TCE CONTAMINATION BEING ADDRESSED AT THIS SITE?

Under its agreement with MDNR, PerkinElmer has installed vapor intrusion systems at five residences where elevated levels of TCE have been detected in indoor air. These systems are installed through the basement floor or foundation slab. A small fan pulls vapors from beneath the home's foundation and sends them outside, where they dissipate quickly. Further air sampling is planned to ensure that the systems are working properly.

Under a proposed agreement, EPA Region 7 will work with PerkinElmer to further characterize the groundwater plume, sample additional homes to determine if vapor intrusion is occurring, and take mitigation measures, where appropriate.

For more information about TCE at this site, contact:

Gregory McCabe

Environmental Protection Agency Region 7 11201 Renner Boulevard Lenexa, Kansas 66219 Phone: 913-551-7709

Toll free: 800-223-0425 mccabe.gregory@epa.gov



FREQUENTLY ASKED QUESTIONS CHICAGO HEIGHTS BOULEVARD SITE

Q: What is the Chicago Heights Boulevard Site?

A: The Chicago Heights Boulevard Site is an area of contaminated groundwater, located in an unincorporated area of St. Louis County, Missouri. Regulatory oversight for the site was referred to EPA Region 7 by the Missouri Department of Natural Resources (MDNR) in September 2012. The contaminants of concern at this site include a group of chemicals known as volatile organic compounds (VOCs).

Q: Where is the groundwater contamination coming from?

A: Information collected from various investigations indicates that the contamination is coming from the Missouri Metals facility at 9970 Page Avenue. Industrial chemicals used at this location were somehow released on the property and seeped into the groundwater below.

Q: How is the site affecting the neighborhood?

A: Contaminated groundwater has migrated beneath part of the surrounding neighborhood. VOCs in the groundwater can evaporate and may affect the indoor air quality of homes or buildings above the area of groundwater contamination. This is known as vapor intrusion. Test results indicate that several homes in the neighborhood have been impacted by vapor intrusion.

Q: Is my drinking water contaminated?

A: Contrary to rumors and some reports in the news media, EPA has found no reason to indicate there are any health risks posed by drinking, cooking, bathing or otherwise using the City water that is supplied to the Elmwood Park neighborhood.

Q: What is the primary contaminant of concern?

A: The primary contaminant of concern is Trichloroethylene (TCE).

Q: What is TCE?

A: TCE is a colorless liquid solvent. It is odorless at the low concentrations being found in some of the homes in Elmwood Park. TCE is used primarily for cleaning and degreasing metal parts. It has also been used in adhesives, paint thinners, spot removers, and typewriter correction fluid. In the past, it was even used as a surgical anesthetic. Because TCE is used in many industrial, household and hobbyist products, it is not unusual for very low concentrations to be found in indoor air. TCE is one of the most common contaminants found by EPA at groundwater contamination sites around the country. At the Missouri Metals facility, TCE was used to clean aircraft component parts that were manufactured at the facility. TCE is no longer being used at the facility.

Q: What are the health effects of exposure to TCE?

A: Exposure to TCE can cause adverse health effects, especially at high levels. Impacts to the central nervous system, male reproductive system, immune system, kidney and liver function, and the developing fetus have all been reported, as have some fatalities, as a result of exposure to very high concentrations of TCE.

High concentration exposures to TCE have typically occurred in the cases of industrial workers who experienced regular or prolonged exposure to TCE in association with their jobs, and not to persons exposed to TCE because of vapor intrusion in their homes.

Q: What is EPA's plan to address the site?

A: EPA is working with PerkinElmer, Inc., which owns the industrial facility, to plan and conduct additional site investigations and to perform appropriate response and cleanup actions. Since August 2012, vapor mitigation systems have been installed in five homes in the Elmwood Park neighborhood, and indoor air testing has been conducted in the 10 homes closest to the area of known groundwater contamination.

EPA anticipates that additional testing will be conducted in the neighborhood, and it is possible that mitigation systems could be installed in other residences if results of environmental sampling confirm they are needed. EPA is evaluating existing information about groundwater contamination at the site, and will pursue additional investigation and cleanup actions as needed.

Q: Where are the areas of concern?

A: The area of concern is the Missouri Metals facility and Elmwood Park, the residential neighborhood situated generally east and southeast of the facility. To date, volatile organic compounds, including TCE, have been detected in indoor air and/or sump water at 10 residential properties in Elmwood Park. Additional testing is needed to fully define the area of concern.

Q: How many homes in the neighborhood have been tested for TCE vapors?

A: A total of 14 homes have been tested for the presence of TCE in indoor air. Of those homes tested, 4 homes showed no detectable levels of TCE. Of the 10 homes with detectable levels of TCE, only 5 homes showed the presence of TCE above a health-based level of concern.

Vapor mitigation systems have already been installed in five homes. These systems work to remove any vapor intrusion caused by contamination from the groundwater underneath the homes. Indoor air testing will continue in the neighborhood and it is possible that additional mitigation systems will be installed in more homes, depending on the test results.

Q: Will every home in Elmwood Park be tested?

A: Probably not. The homes that need to be tested first include those that are situated above the area of known groundwater contamination. Additional homes that are in close proximity to the

known area of groundwater contamination may also need to be tested. EPA will conduct the testing in a phased approach, and will continue testing until the entire area of impact has been defined.

EPA has reached a tentative settlement agreement with PerkinElmer, Inc., the current owner of the industrial property, to begin additional testing at the site. This additional testing will further define the location of the groundwater plume, and it will help EPA determine whether additional homes may be impacted. EPA plans to work outward from the known area of contamination to determine how far the contamination has moved underground.

Q: When can I get a health assessment?

A: EPA does not conduct health assessments. Individuals who wish to obtain a health assessment should seek assistance from the St. Louis County Health Department, or other medical providers.

Q: Is it safe for children in Elmwood Park to play outside?

A: Playing outdoors, in yards or parks, should not pose any risks of exposure to the groundwater contamination. Vapor intrusion is only associated with enclosed spaces or structures (basement or crawl space) that lie above an area of groundwater contamination where vapors can accumulate and become concentrated. In an outdoor setting, vapors will quickly dissipate into the air.

Q: Do I need to move?

A: EPA Region 7 has not determined that there is any need for residents in the Elmwood Park neighborhood to move. As EPA and PerkinElmer continue working to assess and clean up the site, EPA will keep residents and stakeholders informed of progress, including any new information that may be of concern to residents.

U.S. Environmental Protection Agency, Region 7 11201 Renner Boulevard, Lenexa, Kansas 66219

Iowa, Kansas, Missouri, Nebraska, and Nine Tribal Nations

Public Meeting Scheduled Oct. 25 on Agreement for Cleanup of Chicago Heights Boulevard Site in St. Louis County, Mo.

Contact Information: Chris Whitley, 913-551-7394, whitley.christopher@epa.gov

Environmental News

FOR IMMEDIATE RELEASE

(Lenexa, Kan., October 18, 2012) – EPA Region 7 has reached an agreement with PerkinElmer, Inc., for the investigation, mitigation and cleanup of hazardous wastes at the Chicago Heights Boulevard Site in north St. Louis County, Mo. The agreement is subject to a 30-day public comment period, which begins today, before it becomes final.

EPA Region 7 will hold a public meeting to discuss the proposed agreement from 7 p.m. to 8:30 p.m. on Thursday, October 25, at the First Baptist Church of Elmwood Park, 1452 Dielman Road, in north St. Louis County. Persons attending the meeting will have the opportunity to ask questions, receive information, and provide their comments about the agreement.

The Chicago Heights Boulevard Site involves a contaminated groundwater plume located in an unincorporated area of north St. Louis County. At some time before 1988, an unknown quantity of the industrial chemical trichloroethylene (TCE) was released at an industrial property located at 9970 Page Avenue, just northwest of the Elmwood Park neighborhood, and traveled through the soil and into the groundwater. Since then, TCE and other contaminants have been detected in groundwater beneath the residential area of Elmwood Park, and TCE vapors have been detected at levels of concern in five residences situated adjacent to the industrial site.

PerkinElmer, which purchased the industrial property in 1988, has worked with the Missouri Department of Natural Resources (MDNR) to identify the extent of the groundwater contamination plume at the site, and has installed vapor mitigation systems in the five affected residences.

In September 2012, MDNR transferred regulatory oversight for the site to EPA Region 7.

Today, EPA's proposed Administrative Settlement Agreement and Order on Consent was placed on public notice. EPA's agreement, issued under the authority of the federal Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), lays out a series of tasks that PerkinElmer has agreed to perform at the site:

- Under a Vapor Intrusion Mitigation System Design and Implementation Work Plan, PerkinElmer will continue to maintain the vapor intrusion mitigation systems that it has already installed in the five Elmwood Park residences, and install and maintain additional systems in other homes of the neighborhood where future environmental sampling may indicate a need.
- PerkinElmer must continue its implementation of a May 2011 Supplemental Investigation Work Plan, which was developed pursuant to a consent agreement with MDNR in 1994, to further investigate the extent of hazardous waste contamination at the site. EPA may require revisions to this plan.

- At EPA's request, PerkinElmer must develop and submit for EPA's approval a Source and Plume Sampling and Analysis Plan that details the work it intends to perform to define the extent of the groundwater contaminant plume at the site. Upon approval of the plan, EPA anticipates that the work required by the plan will occur in phases.
- Within 120 days of receiving and validating the environmental sampling data gathered
 under the Source and Plume Sampling and Analysis Plan, PerkinElmer must submit a
 report to EPA detailing the work performed, as well as all relevant findings, data,
 observations and analyses resulting from the work. This Source and Plume Sampling and
 Analysis Report will be subject to EPA's review and approval, and must include an
 updated human health baseline risk assessment for the site.
- Within 30 days of EPA's approval of the Source and Plume Sampling and Analysis
 Report, PerkinElmer must submit to EPA for its review and approval a work plan and
 schedule for conducting a Response Action Evaluation. Ultimately, PerkinElmer must
 submit a report that evaluates potential response actions for the site, and proposes a
 preferred alternative action or actions for cleanup of contamination at the site.
- Within 30 days of EPA's approval of PerkinElmer's Response Action Evaluation report, PerkinElmer must submit to EPA for review and approval a Response Action Work Plan that describes the work necessary to implement the response action or actions selected by EPA, including interim actions. Upon approval of this plan, EPA anticipates that the work required by the plan will occur in phases.
- Within 60 days of completing any interim actions, and within 60 days of completing all of
 its work under the Response Action Work Plan, PerkinElmer must submit reports to EPA
 for review and approval that detail all of the work performed and all relevant findings,
 data, observations and analyses resulting from the work.

The public has until November 19, 2012, to submit comments to EPA Region 7 on the proposed agreement, a copy of which is available at www.epa.gov/region7/cleanup/chicago heights As part of the administrative record file for the site, copies of the agreement are also available for public inspection at three local libraries: St. Louis County Library, 1640 S. Lindbergh, St. Louis, Mo., 63131; Mid-County Library, 7821 Maryland Avenue, St. Louis, Mo., 63105; and Indian Trails Library, 8400 Delport Drive, St. Louis, Mo., 63114.

Comments on the proposed agreement will be accepted orally or in writing at the October 25 public meeting, or they may be sent in writing by mail or email, no later than the close of business on November 19, 2012, to: Belinda Young, U.S. Environmental Protection Agency, Office of Public Affairs, 11201 Renner Boulevard, Lenexa, Kan., 66219, young.belinda@epa.gov

EPA Region 7 will consider all comments submitted during the public comment period, and may seek to modify or decline to enter the final order of the agreement if the Agency determines that comments disclose facts or considerations that indicate the order is inappropriate, improper or inadequate.

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Learn more about EPA's work at the Chicago Heights Boulevard Site: www.epa.gov/region7/cleanup/chicago_heights

More about the site is available from the Missouri Department of Natural Resources: http://dnr.mo.gov/env/hwp/sfund/missourimetals-elmwoodpark.htm

> Connect with EPA Region 7 on Facebook: http://www.facebook.com/eparegion7

Certified Copy

In the Matter Of:

EPA PUBLIC AVAILABILITY MEETING

MEETING

October 25, 2012

APPENDIX 7



800.211.DEPO (3376) EsquireSolutions.com

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\mathcal{I}	1	EPA PUBLIC AVAILABILITY MEETING				
	2	CHICAGO HEIGHTS BOULEVARD SITE				
	3					
	4	held at the First Baptist Church of Elmwood Park				
	5	1452 Dielman Road				
	6	St. Louis County, Missouri 63132				
	7	7:00 p.m.				
	8	OCTOBER 25, 2012				
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	17					
	18	Reported by: Celena D. Moulton, RPR, CCR, CSR				
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1	MS. YOUNG: Good evening. My name is
2	Belinda Young. I'm with the Environmental Protection
3	Agency in, now, Lenexa, Kansas. I'm a Community
4	Involvement Coordinator in the Office of Public Affairs.
5	So I'm working with the public on this project.
6	If you received a flyer announcing this
7	meeting, my name is listed on the contact portion on the
8	end. It's listed for general information if you want to
9	ask questions.
LO	To move quickly through this portion, I
L1	would like to recognize any elected officials or their
L2	representatives that may be in the audience this
L3	evening. If not, we'll move on.
L 4	We can recognize that Dr. Pruitt is here
L5	with the NAACP, so he's been getting information. We
1 6	have representatives here from EPA, as I said.
L7	We also have representatives from the
18	Missouri Department of Natural Resources, the Missouri
L9	Department of Health and Senior Services and the Agency
20	For Toxic Substances and Disease Registry. They have
21	information that will be available through our public
22	meeting this evening.
23	Comments provided at this evening's meeting
24	will be documented. We have a court reporter. EPA
25	began a 30-day public comment period that runs from

October 18th through November 19th. The comment period is related to an agreement between EPA and PerkinElmer, 3 Incorporated to address contamination in this area. 4 Information on that agreement can be found in several repositories in the area: The St. Louis 5 County Library, the Mid-County Library, Indian Trails 6 Library, and at the EPA Region 7 website. And we have 8 information in our records center. The facilitator for this evening will be 9 Shawn Grindstaff. We're going to have a facilitated 10 | 11 meeting. As I said, your comments will be documented. 12 The presenters for this evening will be David Hoefer, who is our Regional Counsel at EPA. 13 l 14 will be talking about the legal agreement. Then we'll 15 have Dan Gravatt. He'll give us a status update for the site and the next steps. 17 We ask that you hold your comments and questions until the presentations are ended. If you've 18 19 got some papers, you can take notes as you move through the presentations. If you need paper, we have paper out 20 21 at the table. 22 If you didn't get a chance to sign in on those blue cards, we don't want to overlook anybody.

want to make sure that we have everybody on our mailing



list. We want to include everybody.

1	The meeting this evening is part of our re-					
2	community involvement process. We want you to know the					
3	EPA cares. The EPA is here to keep you well-informed.					
4	We encourage and enable the community to get involved.					
5	We listen to your comments.					
6	Other communities in Region 7 have gotten					
7	involved, and sometimes the community decides to form a					
8	community advisory group. That group serves as a					
9	liaison for comments and concerns that the community has					
10	with EPA. We want to make sure there are additional					
11	processes that can help you to get involved.					
12	At this point, I'll turn the mic over to					
13	Shawn Grindstaff, our facilitator for this evening.					
14	MR. GRINDSTAFF: Thank you very much. Good					
15	evening.					
16	I wanted to tell you a little bit about					
17	myself first so that I can explain the role that I have					
18	in the meeting tonight.					
19	Facilitator, what it really means tonight					
20	is that we want to be able to get through the meeting					
21	and accomplish several different things. We're kind of					
22	rolling several things into one tonight. So time, it					
23	ticks away very fast for all of us, so I want to make					
24	sure we move from one thing to the other.					
25	Now, the things that we're going to do					

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tonight, the first part is the presentations that you 1 2 will hear. The reason is, under federal law at this point, under the Resource Conservation and Recovery Act, 3 which people called RCRA, there is a piece of that law 4 5 that says at this moment of the proposed settlement of 6 this order, that we speak to the public about this and that you have this time period to comment.

That's a very formal process. That's why 9 we have the court reporter here. And she will be taking down every word. We need to get through that. why I ask again, like Belinda said, you can hold all your questions and comments until the presentations are over.

Then Belinda and I will have two mics. I 15 know there are several people. Especially in this church, you might not be able to move about. We will bring the mic to you. At that point, we will go to questions and comments.

Then after that, because there's another 20 portion of the community that wants to speak privately and confidentially, we have at the end of the meeting a 21 public availability session. We'll have broken-up areas with different people in different places. So time will lgo by quickly.

So that will be my role is to keep things



1	moving quickly. David and Dan are going to go ahead and					
2	make the presentations. Again, if you bear with me with					
3	our different pieces of this, it will help.					
4	I've been doing meetings like this, lots of					
5	different meetings, for about 20 years. I've learned a					
6	lot of hard lessons.					
7	The thing I've learned the most, is that					
8	it's important that everybody in the community,					
9	everybody has a chance to talk in their own way. Some					
10	want to talk privately. Some want to talk in front of					
11	others. We're going to try to meet everybody's needs					
12	tonight.					
13	We'll go ahead and hand it over to David.					
14	Thank you.					
1.5	MR. HOEFER: Good evening. My name is					
16	David Hoefer. I'm an attorney with the Environmental					
17	Protection Agency. I've worked with the company known					
18	as PerkinElmer to come up with a settlement agreement.					
19	That is what I'm going to talk about.					
20	My presentation is very brief. We have					
21	this it's called an Administrative Settlement					
22	Agreement and Order on Consent. It's on our website.					
23	It's publicly available. The primary purpose of the					
24	meeting itself is to discuss, get comments on this					



25 order.

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1	We have a legal obligation when we have an					
2	imminent order of this nature to put it out for public					
3	comment, to get comments whether there's anything was a					
4	inappropriate, improper or inadequate. That's my role					
5	tonight.					
6	I worked with PerkinElmer on this. This is					
7	a legal agreement. As Shawn referenced, there's a					
8	couple statutory authorities that we use. One that you					
9	may have heard of before that is a fairly common statute					
10	known as a superfund; and that's the Comprehensive					
11	Environmental Response Compensation and Liability Act.					
12	The other one is RCRA, Resource Conservation and					
13	Recovery Act.					
14	So there's legal authorities that we use					
15	when we negotiate this order. And those are authorities					
16	that Congress made to us for resolutions like we have in					
17	this community.					
18	We did this in very short order. Dan, I					
19	think, will discuss how long the EPA has been involved.					
20	It's not been very long.					
21	When we got involved, I approached					
22	PerkinElmer, and we talked about, "We have a problem					
23	here that needs to be addressed." So in very short					
24	order, we negotiated this order. It was a very short					

25 period of time. In a very short period of time, we



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negotiated this order. 1 I sent this to PerkinElmer for negotiation on September 14th. We provided two weeks for negotiations on this. I worked with their attorneys. It was pretty intense during that two-week period to come to this agreement. They signed it on October 2nd. 6 7 It's not effective until EPA signs it. EPA will not sign this until it's gone through public comment. The public comment period runs from last week, 10 I believe it was October 18th through November 19th. 11 So once we get through the public comment period, we will evaluate the comments that we receive on 13 this to see if this is still something that we want to enter into with PerkinElmer, or do we want to have it 14 15 modified, et cetera. 16 That is one of our purposes tonight is to find out what the community thinks about this agreement. This is a fairly technical document. It's 18 a very typical document for these types of settlements. 19 It contains a lot of boilerplate language in here that 20 is standard findings of fact. It gives the history of 21 22 the site, history of PerkinElmer's involvement, our 23 |involvement, et cetera. 24 Probably the most-relevant portion of this 25 for the community should be the "Work" section. There's



a portion of this that details what work PerkinElmer 1 will be performing at this site. 3 Just to be clear here, this is a legal agreement, legally-binding agreement. And pursuant to this, PerkinElmer is agreeing to do certain activities 5 in your community to ascertain the extent of the contamination and to address the contamination. So it's a very comprehensive agreement. 8 | Dan will address the work requirements. 9 10 have phased work that's going to be performed under this It's quite a bit of work. It's a very 11:lorder. 12 comprehensive order, very aggressive order. 13 This becomes enforceable upon EPA's signature. Again, we won't sign it until the public comment period is over. So it will be sometime around 15 Thanksgiving before we sign this and it actually becomes 16 17 operable. This is, again, a legally-enforceable 18 We have penalties that PerkinElmer has 19 agreement. There are also statutory penalties. If we 20 agreed to. need to, we can enforce this in federal court. 22 both with regard to penalties and with relief to make 23 sure the work is performed.

Let me say, PerkinElmer -- I don't know if

25 you know much about PerkinElmer. We engaged them early



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October:25, 2012 ೧೬೮೯ - ೧೯೬೬ - ೧೯೪೩ - ೧೯೮೩ ರ ೧೯೮೩ - ೧೮೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೯೮೩ - ೧೮೮೩ - ೧೯೮೩ - ೧೮೮ - ೧೮೮೩ - ೧೮೮ - ೧೮೮೩ - ೧೮೮೮ - ೧೮೮೮ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮ - ೧೮೮ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮೮೩ - ೧೮

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1	in September on this issue. We!ve worked very
2	aggressively with them, had very productive
3	negotiations. And we did this in two weeks, which
4	frankly is the speed of light, from our perspective. So
5	we had a very good experience negotiating this.
6	Probably the most relevant or most
7	interesting aspect of this is probably going to be the
8	work.
9	We have Dan Gravatt and John Frey. And Dan
10	is going to explain in some detail the work requirements
11	of this order. And at the conclusion of this, we'll be
12	available to take questions.
13	MR. GRINDSTAFF: Dan, if I could interrupt
14	before we start, there were a lot of people who just
15	walked in. I wanted to re-explain the format tonight so
16	that we can get through the meeting and everybody can be
17	home at a reasonable hour.
18	And that is this: Under the law, under
19	something we call RCRA, this meeting tonight is a little
20	different because we've got different pieces. So what
21	we're doing right now is hearing two presentations on
22	the order settlement part of it.
23	Then after that's over, we'll have

24 questions and comments in which two of us will carry the



25 mic to each person.

Then after that, we have another group in the community who wants to meet privately and confidentiality. So what we'll do then is break up into 3 groups. I'm going to be the facilitator to work 5 with you so we can get through each piece that we have to do and that we'd like to do in the community. want everyone to have a chance to be able to speak to someone. 10 So if everyone will bear with me, we'll 11 keep moving on. So David just spoke. And we're going to have Dan speak in the second presentation. 12 13 There was one thing I didn't MS. YOUNG: say. Number one, can everybody on this side of the room 14 see this projected image? Secondly, does anyone in the room know of anyone in this room who is hearing impaired? We do have a sign interpreter here and I 17 didn't say that. Okay. Thank you. 18 19 MR. GRAVATT: Good evening. My name is Dan 20 Gravatt. I'm with the Superfund Program in the EPA's Office in Region 7 in what was Kansas City and now is 22 Lenexa, Kansas. 23 I'm the remedial project manager for the 24 site, kind of co-leading with John Frey, who is here,

25 also. He's an On-Scene Commander from EPA. We are

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splitting the duties because this is going to be a very long-term project. There are some things we are doing right now to address immediate issues. There are going to be some very long-term things that I will get into here. They are all covered under the order that Dave has been telling you about.

How EPA got involved in the site, MDNR had been working on this for a number of years; but in July and September of this year, it decided to refer management of the site to us. That was something that we agreed on and agreed to do it pretty rapidly. So we're going to keep them involved in the process. But the order that we're signing is between EPA and PerkinElmer.

Since that referral, we've had five vapor intrusion mitigation systems installed out of the neighborhoods where we found the trichloroethylene or TCE vapors in their homes above the health-based risk level. That's already been done. It was done back in September.

Also, as has been referred to, as David said, we've been through a very aggressive negotiation schedule with PerkinElmer to get this order in front of you folks for your public comments.

The public comment period began a few days



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ago and goes on for 30 days. What was the end date? The 19th?

MS. YOUNG: November 19th.

MR. GRAVATT: So there's still a couple of 5 weeks for you to read that and to comment. I hope you do that. There's a lot of stuff that's technical, legal language, boilerplate.

If you go to "Work to Be Performed", there's a specific section that has that title, "Work to 10 Be Performed". And it has I believe seven tasks that I 11 will go through very generically here for your benefit. |So when you pull that document up and take a look at it, you will be better able to understand what it is that 14 PerkinElmer is able to do at the site.

Before we go on, I want you to know that this order covers, as far as we know, all the work that is going to be necessary to clean up the site. It does 18 not say how long that is going to take, but it includes all the steps that will be required to fully clean up 20 the site.

I know that some of you who were here on our earlier meetings or met one-on-one with us, with John or I earlier, will know this part of the story. I 24 want to give this again because there are some who are 25 new to the process.



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The main issue is the contaminant within the groundwater underneath some of the homes and underneath the Missouri Metals Site is vapor intrusion. The chemical that was spilled is a solvent called trichloroethylene or TCE, and a related solvent called 6 tetrachloroethylene; or P as in Paul, PCE.

Those solvents were used at the Missouri Metal site to clean parts that they were manufacturing. Through a variety of reasons that we're not quite sure of, these chemicals, these solvents, were released onto 10 l the ground and migrated down into the shallow aguifer in the neighborhood of 20, 30, 40 feet in the ground.

Once this solvent mixes with the groundwater, it starts to dissolve. That dissolved solvent in the groundwater starts to move with the 16 natural groundwater underneath the ground. As it moves, 17 in this case, it happens to move to the southeast under part of the residences in the area.

Now, the groundwater that's beneath these homes is not the water that you're drinking. that's been a concern in the past. We've had fact sheets to try to explain this better. The whole 23 neighborhood is on city water. The city's drinking 24 water does not come from the groundwater in this area. 25 There is no impact to the drinking water that you have

in this area.

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The groundwater is contaminated. way people can be exposed, in this case, with a solvent like trichloroethylene or tetrachloroethylene, it tends to evaporate out of the water. It's a little bit like bubbles coming out of a bottle of soda. It's not exactly that way, but it's a useful way to think about The solvent wants to be a gas, so it comes out of the water.

As gas, it tends to migrate through the It tends to migrate upward. If it migrates 11^{-1} upward and comes out in your lawn or something like 13 that, it's not a problem.

If it migrates up and comes into someone's . basement or the crawl space and can accumulate there, it can reach levels that are above levels that we believe are safe for human health.

We do have toxicologists here who are available to chat with you about that in the informal part of the presentation later. So vapor intrusion is a process of this solvent coming out of groundwater, migrating into people's homes and potentially reaching levels that could affect human health.

As far as we know, that is the only way that people in the neighborhood can be exposed to this



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chemical. It's not i	in your o	drinking	water.
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So, as I said, the work in the order requires PerkinElmer to investigate and clean up the contamination and to address the vapor intrusion issues.

This picture here is a picture that I pulled out of a site that I worked on a number of years ago. It's an example of the kind of machinery that would be used to install the monitoring well.

There are several different types of work that we are going to need to do here to make sure that we can understand exactly how far this contamination has gone, and collect additional data that can help us decide what type of technology to use and where to use it.

And as Dave said, the work is going to be done by PerkinElmer. They're paying for it. But it will be done by EPA oversight. We will be reviewing their work plans. We will be approving the reports for the work that they do.

And to get back to how it will be described in the order itself, the tasks that I referred to earlier, the tasks are fairly generally described in the order.

As we go forward, PerkinElmer will write
work plans that will describe exactly how they're going



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<u>.</u>	to do each phase of the work. That's a document that
2	the EPA will review to make sure they're adequate and
3	will approve PerkinElmer to go through and do that work
4	That will be for several phases that you will see for
5	the work in the order.

6 1 3 5 7 1 34 5

The first task that you'll see in the order when you take a look at it is to deal with the immediate risk to the households that have vapors in their homes above that health-based risk level.

And that, as I said earlier, has already been done. Out of the ten homes that were tested, five of them did have levels that were above the health-based risk standard. And those vapor intrusion systems that you very generically described here have already been installed.

It's basically a process of sucking the contaminated vapors out from beneath the slab or the 18 bottom of your basement before they have a chance to get into your home. They get sucked out and then ejected in a pipe that's on the side of the house. They go out into the ambient air where it's no longer in a concentration that can be of risk to people.

So going forward, I know that there's been a lot of questions about whether other homes will be tested, whether other homes will have those systems



1	installed. The work that we're going to be doing in
2	this order under the earlier tasks will give us the
3	information we need to decide which homes are at risk
4	that will be tested. And that's not something that we
5	will be able to answer tonight.
6	. I know a lot of you will want that answered
7	right away. We don't have all the information we need
8	yet to decide exactly whose homes need to be tested.
9	All right. This is an example of another
10	type of field instrument that will be used, potentially,
11	here. This collects soil samples. And this is
12	something that will be part of the supplemental
13	investigation work plan that's probably going to start
14	in late November.
15	This is a work plan that MDNR had put
16	together before the site was referred to EPA, but we're
17	using it because it includes a lot of useful work that
18	we need to do. It helps us move forward more quickly.
19	Coming up in November, we're going to have
20	PerkinElmer out here collecting soil and samples.
21	They're going to be installing monitoring wells in the
22	neighborhood. These are permanent monitoring wells that
23	will be sampled from time to time.
24	We will be using that data when we get it
25	lon whore the contamination is in the groundwater and



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where	e it	is in	: the	e soil	l: and	in	the	gas'i	in th	ne	soil	to:
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At that point, any homes that might be a set identified that might be at risk, the owners would be contacted to arrange sampling. Again, this will all be subject to EPA oversight and review and approval to make sure that our toxicologists, geologists, our scientists review it to make sure that we're taking the appropriate actions.

Once we have that data, we will need to go back and work more on the Missouri Metals facility itself, the industrial facility north of the road there. Because as much work as we can do on addressing the groundwater plume, there is source material that will continue to contaminate the groundwater if we don't 16 remove it.

The source material originally was the solvents that the PerkinElmer facility used. Once it was spilled onto the ground, it mixed into the soil.

Even if we were able to clean up the plume, more groundwater will move into the area and will contact that source material and will continue to generate a groundwater plume.

- The ultimate goal is to remove that source. 25 It will be gone once the source is gone. If we don't



get the source, the plume will remain. There's an state 1 additional amount of work that we need to do at the site 2 to determine exactly where this source material is so that we can treat it or render it so it cannot move 4 anymore so it will not continue to contaminate the 6 groundwater. Ż That will be, you know, an additional process that will involve additional soil samples, potentially additional sampling wells on the Missouri Metals facility itself, et cetera. 11 So the work that we have been doing and the 12 work we're going to continue to do in the work under the 13 tasks in this order, it's all to determine how we can be 14 best clean up the site in the long-term. 15 In the short-term, we're focusing on the 16 actions that will protect the residents from any 17 unacceptable human health risk. That, so far, has been 18 mainly in the form of indoor air testing and installing the vapor mitigation systems. 19 20 That's the short-term part that keeps 21 people safe and gives us the time to do the 22 more-detailed analyses and investigations to determine

23 how we can clean this up permanently in the long-term.

25 | source material that I was discussing a moment ago.

That's mostly the process of removing the



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Once that source material is removed, the groundwater plume will naturally, over time, disappear. So these are the things that you're

probably going to see happening in the neighborhood in the next few months or that you already have seen happening.

Obviously, there are five vapor mitigation systems that are already installed and operating. week, the PerkinElmer people will be out to take an additional sample of the wells and make sure that 11/they're operating properly and protecting those 12 residents.

Because vapor migration into your home is partly controlled by the weather and whether you have your windows open or closed, whether your air conditioner is running or your heater is running, it affects how those vapors will migrate into the homes.

So there will be periodic sampling through the ten homes that are currently being sampled throughout the years to see if seasons and how you use your air conditioner and heater affect how those vapors are migrated into your home. Additional samples will be -- or vapor mitigation systems will be installed in 24 homes.

The step-out vapor intrusion sampling that



1	I mentioned there is something that we will evaluate.
2	once we have the data from the additional soil and soil
3	gas and groundwater investigation that PerkinElmer will
4	start doing in November.
5	And as I said, if those results indicate
6	that additional homes are at risks, we will contact
7	those homeowners to get those homes sampled.
8	And if those samples from those additional
9	homes indicate that there are unacceptable risks in
LO	those homes, those homes will also receive the vapor
11	mitigation systems very similar to the ones that are
12	already installed.
13	And, again, in November, you're going to
14	see some drilling rigs and trucks in the neighborhood
15	for installing those monitoring wells, for installing
16	these soil gas sampling points.
17	PerkinElmer will need to get access to
18	certain properties to do that work. And if your
19	property is one where a monitoring well-or a soil gas
20	point is planned, I would ask you, you know, to
21	cooperate with them and grant access so we can gather
22	the data that we need to do our investigations.
23	. And with that, Belinda, should I turn it
2,4	back to you or Shawn?

MR. GRINDSTAFF: This slide here is very



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important. I'll probably say this a few more times
before we break up here in a little bit: And that is
that you have until November 19th. And I know there
were a few more people that came in late. Soil will
tell you, this isn't the end of this tonight.

In fact, Belinda told me and reminded me

In fact, Belinda told me and reminded me again a few minutes ago that they will be back at the church for further listening posts, as well. If you arrived late, I was explaining that we have several things that we're trying to accomplish tonight.

But we don't have a lot of time. But that's something that's really critical. That is, if you would like to talk to Belinda, you can do this formally. You can comment however you want. You can mail it or they'll be back here --

MS. YOUNG: E-mail.

MR. GRINDSTAFF: Okay. And then they'll have more listening posts and be available here, as well.

So if we run out of time tonight and there are more people that wanted to speak, it's okay that you'll have other chances to do that. And, obviously, until November 19th, we'll accept any and all comments and statements and anything else you might have. So I want to make sure we covered that.



1	The other thing, before we go into the
Ż	questions and comments, in which Itll carry the mic to
3	the person speaking, is a second part that I neglected
4	to mention about this order that is on this fact sheet.
5	I want to read it to you because it's well-worded.
6	Because that is the mission of tonight with this formal
7	part of the meeting.
8	"The EPA will consider all comments
9	received. And it may seek modification or decline to
10	enter into this order if comments received disclose
1,1	facts or considerations which indicate that the order is
12	within the three Is, inappropriate, improper or
13	inadequate."
14	So with our questions and comments tonight,
15	that's what we're really trying to hone in on, is that
16	question. That is, with this order that's in front of
17	you, do you have any fact or do you want to make any
18	statements that it would be inappropriate, improper or
1.9	inadequate? That's really the heart of what we're doing
20	now.
21	I had two cards that had names on them, I
22	believe. Then we'll take the mic wherever we may go.
23	It is Maureen Boone. Okay. And we'll'start here.
24	And the other thing, if I can ask you, just

25 in the interest of time for everybody's sake, we've got

to get in the other group, too. On the church clock here, it's about 7:40. So we probably, one way or the 3 other, need to be done by 8, 8:05. So if you could keep your comments/statements at a minimum, that means more 4 people can talk. And two-and-three part questions, let's see if we can avoid that at the outset. 6 7 MR. BOONE: And I would just like to sav that, you know, the house that -- my grandmother's house 8 at 1914 Chicago Heights at the park, there seems to be 9 cloudy water. I don't know what that was about. very cloudy. That's been for over years and decades I 11 can remember. So that's what I had to say. 12 13 MR. GRINDSTAFF: Thank you. Kim Heggs? 14 MS. HEGGS: My question is: My mom's home has been here for about 40 years, and the basement 16 always leaked because the builders didn't do the 17 foundation properly. 18 So my question is: If the TCE is found in 19 her air at 1401 Werremeyer with the basement always 20 leaking, and it still is, what risk is that? 21 MR. GRAVATT: That's something that we've got some figures on here on these easels in front and back. We can look at them one-on-one and compare the 23 location of that home to where we have information showing the plume is at this point, and maybe answer 25



EPA PUBLIC AVAILABILITY MEETING vour question more definitively there. MR. GRINDSTAFF: If you're in my line of sight, I'll come to you. MS. LAMB: With the groundwater flows to 4

the river -- I moved to Olivette. So how do you know that it hasn't been exposed over there? Also, you're testing the land, but what about the people? What is the half-life of the chemicals in the people's bodies? They're not even here now. Some of them have died.

10 MR. GRAVATT: To answer the first part of 11 your question, we're going to compare the location of her grandmother's home to where we know the plume to be 13 lat this time.

Part of the reason we're doing this |additional task with PerkinElmer is to make sure we know 16 fully where this stuff is. We don't have the data to say, "Here's the stuff here." That's the kind of data 18 | we need.

We're going to take groundwater samples 20 further away from the Missouri Metals facility to find out how far it goes. We'll find out if it goes to the 22 river or where it stops. That's something that we definitely need to find out.

MS. LAMB: What are you doing to find out 25 how it's affecting people biologically?



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1	MR. GRAVATT: That is a question I'm not
;2	prepared to answer. You can ask the toxicologists
3	one-on-cone continues and the second of the
4	MR. GRINDSTAFF: We'll have break-out
5	areas. One of the areas will be for environmental
6	areas. The other will be for health questions, how it
7	affects people. So I will advise you to go talk to
8	them.
9	MS. ROBINSON: Regarding the order, is
10	there anything in the order that would allow homeowners
11	to be in contact with the site? Is there any
12	considerations made for them in the order?
13	Because now that the entire I mean, this
14	is on the news and everything. Now that the entire
15	St. Louis Metro area knows that this particular
16	neighborhood has a problem, I'm going to have to
17	disclose that when I go to sell my home.
18	If I'm going to have to sell my home, I'm
19	going to need something from the EPA that says that my
20	home is not within that plume area if it, indeed, is
21	not.
22	MR. HOEFER: Is your house now within the
23	plume?
24	MS. ROBINSON: You say it's outside the
25	larga



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1 MR. HOEFER: J. can't provide legal advice. You're required to disclose any material facts that a second 2 3 you're aware of that affect your property. We have a result |fairly well-delineated area of contamination that we 4 5 believe the plume is within the Elmwood Park area. If lit's outside that area, you have no obligation to disclose anything if you're outside the area of the 18 plume because you're likely not affected by that plume. 9 Again; I'm not giving you specific legal 10 advice, but I think that's kind of a material item I 11 think you could disclose. Because the evidence, there's 12 no information indicating it affects your property at 13 this point. 14 MR. GRINDSTAFF: The first two comments I 15 l read had the name. That was beneficial to the court reporter, and so I'm going to ask if you could identify 16 17 yourself, too. Because the minute you left your 18 cards -- if you could identify yourself. 19 MS. LAMB: My name is Christina Lamb. 20 MS. ROBINSON: Kim Robinson. 21 MR. GRINDSTAFF: Who was next? We'll start here and then we'll head over there. 23 MS. JEFFRIES: My name is June Jeffries, and I live on Wishart. And the lady who spoke a while

ago, she was asking almost the same question I wanted



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2	Would this effect if you want to sell a
3	your home, I was told that our property has gone down.
4	I don't know if this is true. But I heard that it did
5	go down. And I know well, I don't know.
6	I know in real estate if you try to sell
7	your home, they have to have everything that's there
.8	about'your home as far as the land and whatever. So who
9	would want to move out here.
10	And I don't believe even after they clean
11	it up, people do not believe that this will be cleaned
12	up. I mean, I'm just going to be honest about it. They
13	really don't.
14	MR. HOEFER: With regard to 4- I believe
15	that if you have a mitigation unit in place a lot of
16	people have radon units in their house. Vapor
17	intrusion, if you have vapor in your house, that's
1,8	taking care of the problem.
19	From a practical standpoint, you know, does
20	that reduce the liveability of your home? Probably not.
2,1	I mean, you have the inconvenience of having minimal
22	inconvenience having a unit in your house.
23	Do you have to disclose that? Yes. You
24	likely may have to disclose that. May that scare

25 somebody off? It could. Would that scare somebody off?



1 Frankly, it shouldn't. Your house is the same with that unit in place as with no contamination. 3 . We will be understand. You say superfund and it is scares people off. We understand that happens. the health perspective, we don't think that should be an impediment to people living there. 7 MR. PRUITT: Adolphus Pruitt, NAACP. I have a technical question. I may be able to help those 🖟 property owners. 10 I know you want to break out into individual groups and have a dialogue with individuals. 11 Would that be part of this record? 12 13 MR. GRINDSTAFF: Typically, they are more 14 informal, especially with health questions. When we're done with this portion, we would have the court reporter 15 shut down that part. We would have people still be here 17 to talk. 18 MR. PRUITT: I guess my concern is outside 19 of individual health, just this guestion about the 20 grandmother's health in the plume area and other wards, 21 there may be some dialogue that comes out that addresses 22 the outline that you just read; that addresses the 23 public documents that may be a part of this public 24 record. The second state of the second state o 25° I'm trying to figure out: When you do this



breakout, how does that portion become a part of the public record, especially if somebody is critically 3 sensitive? 4 MR. HOEFER: Unfortunately, some of this is 5 driven by the legal concerns. We're required by law to get comments on the order whether there's any aspect on 6 7 whether it's inappropriate, inadequate. That is required by law. 8 9 One of the reasons we have a public 10 availability session is to allow people to ask 11 questions. Some people don't want -- particularly, if 12 we have contamination, if we have a VI unit in their 13 house, they don't want other people necessarily to know 14 that. 15 So we do have a requirement to protect personal information which people don't want revealed in 16 a public setting. So it's intentional on our part. 18 We want the record really to address the 19 statutory requirement. That is, is this order improper 20 or inadequate? And if so, why? 21 MR. PRUITT: Let me give a quick example. Say her grandmother's house turns out to be impacted on 23 the plume area. Well, her grandmother has neighbors. She knows or the grandmother knows, but now the 24

25 neighbors didn't, nor has that information become a part:



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1	of the public record? Because public records we would a
Ż	have access to after the comment period, which means
3	they will have a chance to discover that by looking at
4	the end document. As a read of the send document.

I'm just trying to figure out how do we ensure that additional facts that are essential and critical to the residents or their neighbors get to them, even though your purpose was to answer that particular question for that particular home.

MR. HOEFER: Let me state this is not the only time to provide comments. That is how we get all of our comments. A lot of people don't want to publicly talk about their situation. They will e-mail their comments.

It's incorporated into the record that way. 16 Any comments that are submitted into e-mail or through the mail make it into the record.

MR. PRUITT: My second question is: think that it's essential that this advisory group be formed. In conjunction to that, there really needs to be an independent technical consultant that they can 22 rely on throughout the process to keep them informed and things like that.

24 I know I saw a grant process. Is that a 25 potential source to provide the community that sort of



independent voice that they can rely on and converse with in between the meetings? ß MS. YOUNG: We have resources to help groups, community advisory groups, that can provide technical assistance to help people understand 5 documents, technical documents that they can help 7 interpret those documents. 8 So when groups are formed, we're able to have independent people come and help the community advisory group understand so they can bring those 10 11 concerns or those issues to the table and serve as the liaison between a community and here. That process would be for comments. This 13 stage right now is on the order. 15 MR. PRUITT: And for those homeowners, if 16 you really have a concern, it would cost some money, but you can always go ahead and get your individual Phase 1, if necessary, Phase 2, environmental study for your 19 home. the state of the first of the state of the first of the state of the s 20 And that way it would give information that 21 you can give to a buyer to make sure there's no contamination there. And if that information is wrong, that person who provides it, they have a liability 23 situation. So they're going to be fairly thorough in 24

providing that: The second of the first section



1 MR. HOEFER: Let me check these two over the 2 STANDESTONE PRODUCES AND A SE here. 3 MS. ESTHERS: My name is Violet Esthers. understand about you all placing those things to test. In the houses that you place them, will the people be 5 trained on how they're running in case -- I mean, how would you know it's operating correctly, I guess is the question, if you don't know how it's supposed to operate? 10 And then you're saying the stuff will be 11 let out in the air where it's harmless. But as it's coming out, is it harmless if children are around, per 12 13 se? 14 MR. GRAVATT: The first part of that was 15 about how the homeowner with the systems could maintain 16 l them or make sure they're operating properly. contractors that install those systems are giving 17 18 homeowners an informational packet that helps them to 19 understand what it's doing and how to make sure that 20 it's operating properly. 21 As far as the gases that are exhausted from

As far as the gases that are exhausted from this system, whether those are a risk to children, the place that exhausts the vapors from these vapor mitigation systems extends up to the roof line. It's a little bit like a chimney. It does not exhaust below



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the roof level. It dissipates before it can be breathed by anyone.

I'm also here with the NAACP. I'm also here as a former: resident of Elmwood.

MS. KNIGHT: My name is Phyllis Knight.

I want to go back to Adolphus's comments. 7 When we get into breakout group sessions, if a person that has some concerns about their health wants it to be part of public record, do we have that option tonight as well, since you're saying that that part of the program is really off-record? What if we so choose to? Is that possible?

MR. GRINDSTAFF: Once the court reporter stops recording, there will be nothing that will be part of the official record of this particular meeting.

But you always have the option to send us a comment to say whatever you want to say. If a person wants to disclose that kind of information, they are free to do so.

MS. KNIGHT: Well, I certainly understand the need for neighbors and former residents of Elmwood to have some kind of understanding about what others are going through, what they may be experiencing if they so want them to.

How do you suggest that that can be done?



1	Knocking doorsto-doordor something?
2	MR. GRINDSTAFF: As Belinda was describing,
3	that's the function of the community advisory group to
4	get information and get those questions answered. That
5	would be appropriate.
6	MR. GRAVATT: There are lots of ways to do
7	that. This isn't it tonight.
.8	MS. YOUNG: After all the comments have
9	been submitted either at this meeting or by e-mail or by
10	mail, all of those comments become a part of the public
11	record so that you can see those comments.
12	This process is one of the ways to comment.
13	You can also submit comments by mail, e-mail, and then
14	that becomes a public record.
15	And that information, any public
16	information, which I didn't emphasize as well earlier,
17	are going to be at all of those locations on the wall
18	posted behind you, those libraries; our website becomes
1,9	public information. So it will be documented however it
20	comes to us.
21	MR. HOEFER: That's right. At these
22	repositories, all the comments that are made will be put
23	at the repositories. They have three repositories now.
24	We have this order in the repository so
25	it's publicly available. Somebody can gothere and get

a copy. It's also on our website. As we have received comments, it's going to be a dynamic thing. And to the throughout the time here working on the site, we will be adding things to the repository. The idea to that is we want to keep the community constantly informed of what we're doing, if that makes sense. 7 MR. GINDSTAFF: Time is ticking. We'll have this person speak, and then there was a gentleman back here who has been holding his hand up a little bit. 10 We'll go over there next. We'll keep going. And keep 11 your comments brief so we can hear more people. MS. STEWART: My name is Deshad Stewart. 12 grew up in the area. It says that PerkinElmers purchased the property in '88. So you don't know who 14 15 dumped the bad -- the contamination? 16 MR. GRAVATT: The site has gone through a number of owners since it was first there in the 1950s. It's not clear from the records exactly when this 18 19 contaminant was all spilled, whether it was spilled at 20 once or whether it was spilled several times over the 21 years. We don't know. 22 We do know that when PerkinElmer purchased 23 the site in '88, they did some checking and found out

that this material had been released prior to them



buying this.

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* MS: STEWART: And they waited until now to 1 tell us? restriction is also restricted to the section of 3 MR. GRAVATT: They've been working with MDNR before the EPA. 5 MR. BROADUS: Ron Broadus. My wife and I had to have our home tested. We couldn't find anyone to test it because it was going to be a large suit with this. Who do we talk to about having our home tested? 8 9 MR. HOEFER: We can't recommend any particular vendor. We can't recommend any company. 10 |We're not legally allowed to do that. I would imagine 11 any environmental company, any engineering company with 12 13 the expertise in doing this type of sampling. 14 The fact that it's a superfund site should have no effect on their ability to do testing. I'm kind of puzzled by why somebody would have said that. They 17 would incur no liability for doing it. . So you should be able to find in the 18 phonebook in the yellow pages or on the internet, likely 20 nowadays, an environmental company or environmental 21 assessment-type company that would do this type of work. 22 This superfund site should not be an 23 impediment in any way. So I'm kind of puzzled by why somebody would have said that. I would think they would 24 want the business, frankly.



comments on the record tonight. An easy way to do it, sometimes people don't want to get up. We have those blue cards and you all saw them probably when you came in tonight.

But feel free to write -- if you want anything in the record that you're not comfortable getting up and talking about, whatever, feel free to write it out on a blue card and leave it with us, leave it with Belinda or Pam back there. We ask that you put your name on it. But we will ensure that we will get that into the public record. That's another way to do it.

MS. YOUNG: There's index cards and paper if you want to write something down, for time's sake.

MR. GRINDSTAFF: Let me ask a question here. We've got a few minutes to play with.

How many people would like to make a quick comment or statement before we break it up? If you kept it absolutely as brief as possible, let's go -- if other people have no strong objection, let's go a few more minutes. We're going to start here and try to methodically move around. Let's go through it very quickly.

MS. WEST: My name is Valerie West, and I



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have a question regarding the cleanup. The first meeting that you all had, and you had in the Power Point that in 2004 that the company EGG informed you all that their cleanup efforts did not work.

I went through this entire document that you are proposing for cleanup. What in this document will give -- states what will happen if this cleanup. effort doesn't work again?

It took us eight years to find out that first efforts didn't work. What is different in here in these tasks to be performed that's different than what they did before?

MR. HOEFER: One thing that's really 14 fundamental and basic and very important is that this does provide for the vapor intrusion. That is the primary exposure that we're concerned with at this point.

The groundwater, nobody is in contact with the groundwater. Nobody is drinking the groundwater. |Soil contamination may exist at the Missouri Metals facility. We have no reason to expect that people are in contact with that exposure.

The major thing we are concerned about is 24 vapor intrusion in people's homes. We are addressing 25 | that through this effort.



MS. WEST: I understand that. If you stand 1 at the top of Elmridge and you pour water downhill, that water is migrating through. You're saying it's right at 4 the top of the hill, but if I pour a glass of water out, that water is going to run downhill. I am downhill 5 on Elmridge. There is no way you can tell me that stopped at the top of the hill, how large this plume is. 7 8 MR. HOEFER: This is not -- this contamination does not travel like water -- like a 9 10 tabletop. I mean, it's a very slow process through the 11 subsurface. So it takes years. 12 We feel like based on the information that we currently have that the contamination in the shallow aguifer is fairly well-defined and is fairly stable. 14 15 I'm not a geologist. I'm looking at Dan here, that 16 given the clayey nature of the soil, given the very tight nature of the soils, that this is going to move 17 very slowly. Am I somewhat on-point on that? 18 19 : MR. GRAVATT: Yeah. You're somewhat on-point on that. We cannot draw a solid line on a map 21 with the data we have now. Part and parcel is to get 22 the data we need to make that determination. 23 SPEAKER: How long will that take? 24 MS. WEST: Are there going to be provisions 25 for a buyout if these things don't pan out and people



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1 want to move? I'm sure there are people who have been here forever and they don't want to stay. Are you going to include anything in this document to include buyouts: 4 for people that want to go? 👘 🤻

MR. HOEFER: We don't think that in terms of like a buyout or anything like that, we don't think that that would be required at all. I mean, right now, we think that the exposures can be addressed through vapor mitigation systems.

We are charged by Congress to protect human health and the environment. We think we can adequately do that through the mitigation systems, et cetera. regard to -- if you think your property is affected, you think it affects the saleability of your property, I'm not going to argue that that might be the case. That's the reality of it.

Whether or not your property is any less livable due to contamination, again, it very well may be the case that if you have no vapor intrusion within your residence that there's no reason why somebody can't live there forever. If they have no exposure to contamination, iit's not a problem.

There's possibly the stigma that people 24 won't want to live in an area where they think there's contamination. We don't get involved with -- if you



believe there's a decrease in the value of your property, we don't get involved in that. We have an order 2 3 authority, as the EPA, to protect human health and the environment. We're not charged by Congress to protect to 4 property values, if that makes sense. 5 MS. GLENN: My name is Alice Glen. I ve 6 7 resided in Elmwood for 20 years. I first want to say that the people that have gardens, they need to stop eating their food, stop eating from the ground until all this is straightened out. 10 11 But I also want to know that -- you all are 1.2 saying this system will work. At what percentage do you 13 think it will work? She just stated that the first 14 effort didn't come through. Okay. Do you all have a 15 track record of this type of mitigation system? have a track record of other areas that you worked in that would let us know about the cleanup process, you 18 know?

There are people that are homeowners and then there are other people that rent, you know. the homeowners need to be treated just like the people that are renting. It should be all the same.

MR. GRAVATT: Sure. I think what you are 24 you're confusing what Valerie is talking about with 25 vapor mitigation system. Valerie was talking about



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1	stuff done on the Missouri Metals property, at the life in
2	facility itself to try to destroy the material itself.
3	They tried one particular technology in one
4	fairly short event. That event did not fully destroy
5	the source. So that does not mean that failed,
6	necessarily; it just means that we may have to try other
7	things, as well.
8	Now, the vapor intrusion, the vapor
9	mitigation systems that have been installed on people's
10	homes, those have a great track record and are very
11	reliable.
12	When those are installed, the contractors
13	give the home owners information on how to tell if it's
1,4	still working. If it stops working, they have a number
15	to call to get it fixed.
16	MR. GRINDSTAFF: This gentleman has been
17	waiting, and then I'm going to take these two. But at
1.8	8:15, we've got to be wrapped up because we've got that
1,9	other group that wants to visit privately. So let's see
20	if you can go as quickly as possible. Thank you.
21	MR. RASHID: My name is William Rashid.
22	The question I have is if you have tested ten homes,
23	what percentage of that is the population?
2 4	MR. GRAVATT: Do you mean how many homes
25	are in the entire neighborhood? I don't know that off



1	the top of my head.
2	MR. RASHID: How many homes are in the
3	neighborhood.
4	MR. GRAVATT: So about 10 percent, some
5	woman is telling me.
6	MR. RASHID: Do you have any idea when
7	those tests will occur?
. 8	MR. GRAVATT: One thing we can talk about
9	tonight in the breakout sessions is what we can do in
10	this next breakout session that's going to happen in
11	November.
12	There are a couple of figures that show
13	where we plan do the soil gas and monitoring well
14	installations. We'll show you where we think the plume
15	is now and how far outside of that we're going with this
16	first phase of investigation.
17	It does not go to Dielman. We will move
18	outward in steps. When we feel we've found the edge of
19	the contamination, we will stop.
20	MR. RASHID: I have one more statement.
21	One of the ladies stated that we shouldn't be eating
22	from our garden. Is that a true statement?
23	MR. GRAVATT: Again, that's outside my area
24	of expertise. You'll need to talk to some of the
25,	toxicology people here.



MS. LEWIS: My name is Neva Lewis. I stay 1 right on Elmridge like on top of the hill, or right behind -- or like right on the side of my house, is kind 3 of a block off. Water was bubbling out of the ground. 4 5 I was wondering if that was the chemical coming out of 6 the ground. 7 MR. GRAVATT: I know the area that you're 8 talking about. I've driven by that area a couple of times. That is not related to the contaminant plume. 10 There is some sort of problem with the irrigation 11 system. A person with the Housing Authority is telling 12 me that's a problem with the irrigation. MS. LEWIS: Since I'm kind of close to the 13 14 place, is my home going to get tested anytime throughout this process that you all are doing the cleanup? 15 l 16 MR. GRAVATT: Again, that's not something I 17 can answer right now. But we are collecting additional 18 data that will let us know if homes are at risk. We 19 will contact the homeowners to arrange that sampling. 20 JMS. JORDAN-IZAGUIRRE: Can I just answer 2.1 the garden issue? I'm Denise Jordan-Izaguirre. 22 with the Federal Agency For Toxic Substances and Disease Registry. I'll get that out of the way. 24 There is no reason -- and I just checked 25 with the EPA's toxicologist. There's no reason -- and



the state toxicologist. There's no reason you can't ... garden. VOCs do not getrinto the root vegetables. They 3 don't get on to the tomatoes. It isn't uptaken. There : are some contaminants. But none of them here are the kind that will be uptaken. 5 We've done lots of studies on -- I will 6 7 tell you to keep growing your vegetables. It's healthier than what you're getting at the store. 9 This will be the final MR. GRINDSTAFF: question. Again, Belinda has said it numerous times: 10 This isn't it. A listening post will go on. You can 12 e-mail. You can mail. Again, if you want things in the public record, you've got a variety of way to do that. 13 This isn't the end tonight. 14 15 Then we'll have a breakout session. 16 SPEAKER: None of you all live in this area. You're telling us to eat the food. You all don't 17 | 18 live here. I would like to know what exactly you all 19 would do. 20 MR. GRINDSTAFF: Let's go ahead. And then we will break up and conversations can continue. 21 22 have people at different areas. I have one other statement to make. 23 MS. BRANCH: 24 I live on top of Elmridge Road

for 43 years. Now, my house has been tested three



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22 | non-detect.

MS. BRANCH: Would you live there?

MR. FREY: I mean, all I can say is that it

25 was below the health standard for what we said. I don't



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have the records singfront of me. a constant as the For a TCE that's .2 micrograms per meter 2 3 cubed. And PCE is -- I think it's 9.1 micrograms per meter:cubed MR. GRINDSTAFF: All right. Let's go ahead 5 6 and break up. Some people specifically are requesting ! 7 this. We want to make sure they've got time before we 8 have to shut down. 9 Let me tell you one more thing besides the fact that this process is ongoing; that is, one of the groups that will be in here, we have environmental, we have health. We also have representatives from 12 | PerkinElmer who are here tonight, too. 14 If they would introduce themselves briefly, then you'll know who they are, as well. Then we're going to go ahead and adjourn after this introduction 17 and the court reporter will be finished. 18 MS. WASCO: Good evening. My name is 1.9 Stephanie Wasco. PerkinElmer is a U.S.-based company. Our headquarters is based in Boston, Massachusetts. 21 We've been operating for approximately 75 years. 22 We're here today so you're able to put a face to PerkinElmer and be able to answer questions 24 after the meeting. I'm here with Tom Zychinski.

has been working very closely with MDNR, as well as the



1 He will be here with me as I'm not a technical or: EPA. environmental expert. ; We want to convey that your health and, We're committed to the 4 safety is important to us. 5 community. We're committed to staying here and answering your questions. Thank you. And I look 7 forward to speaking with you. 8 MR. GRINDSTAFF: Then the formal part of this meeting for RCRA purposes is now adjourned. 10 will be moving into the breakout. 11 (The meeting was adjourned at $\cdot 12$ 8:19 p.m.) 13 14 15 16 1.7 18 19 2.0 21 22 23 24 25



CERTIFICATE OF REPORTER

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I, Celena D. Moulton, Registered Professional 4 Reporter and Certified Court Reporter and Notary Public 5 within and for the State of Missouri do hereby certify that the witness whose testimony appears in the 7 foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, 11 nor employed by any of the parties of the action in which this deposition was taken, and further, that I am 13 not a relative or employee of any attorney or counsel 14 employed by the parties thereto, nor financially or 15 16 otherwise interested in the outcome of the action.

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700 Notary Public, within and

for the State of Missouri

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My Commission expires September 8, 2014.

CELENA D. MOULTON Notary Public, Notary Seal

Commission # 10431075 Commission Expires September 08, 2014

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